

REMARKS

In response to the Office Action mailed July 20, 2006 Applicants respectfully request reconsideration. Claims 1-6 and 10-29 were last presented for examination in this application. All claims were rejected in the outstanding office action. No amendments are made to the claims herein. Of the pending claims, there is one independent claim, claim 1. Based on the following remarks, Applicants respectfully request that all outstanding rejections be reconsidered, and that they be withdrawn.

Rejections under 35 U.S.C. § 103 should be withdrawn.

Claims 1-4, 6, and 10-29 stand rejected as allegedly being obvious over Lockhart *et al.* (US Patent No. 6,040,138) (hereinafter “Lockhart”), in view of Pharmacia Biotech (Molecular and Cell Biology Product Catalog, 1994) (hereinafter “Pharmacia”), and Melloni *et al.* (Journal of Histochemistry & Cytochemistry, Vol. 45, pages 755-763, 1997) (hereinafter “Melloni”), and further in view of Stahl *et al.* (The Journal of Histochemistry and Cytology, Vol. 41, pages 1735-1740, 1993) (hereinafter “Stahl”). This rejection is respectfully traversed for the following reasons.

The rejection is traversed since the Office Action failed to establish a *prima facie* case of obviousness. The Office Action failed to show that the cited prior art references teach or suggest, either alone or in combination, all the elements of the claims. Independent claim 1, from which the remaining claims depend, is directed to a method for detecting different isoforms of RNA by amplification of the RNA using random primers to make cDNA, degradation of the RNA, fragmentation of the cDNA, labeling of the cDNA fragments, hybridization of the cDNA fragments to an array with isoform

specific probes and analysis of the hybridization pattern to detect the presence or absence of hybridization.

To properly reject a claim under 103 a *prima facie* case of obviousness needs to establish that the references, either alone or in combination teach every claim element. (*See*, MPEP §§ 706.02(j) & 2143). In the previous office action, dated February 27, 2006, the Examiner rejected the claims over Lockhart, Pharmacia, Stahl and Williams. Applicants pointed out that this combination was deficient in at least that none of the references teaches degrading the RNA population or fragmenting the cDNA as required by independent claim 1. In the Office Action mailed July 20, 2006 the Examiner has replaced Williams with Melloni.

Melloni is cited as teaching fragmentation of cDNA as required by independent claim 1. Applicants respectfully disagree with the Examiner's interpretation of Melloni. Applicants assert that Melloni actually teaches only restriction digestion of a double stranded cDNA clone cut from a plasmid by restriction digestion. The plasmid restriction fragment referred to in Melloni as "cDNA" is not analogous to cDNA synthesized by contacting RNA with random primers and extending the random primers with reverse transcriptase as required by claim 1. At p.756 col. 2 of Melloni under section heading "Dde I Restriction Fragment Analysis" and continuing at top of p.757 it is clear that the "cDNA" that is fragmented by the DdeI restriction analysis are fragments of plasmids derived from cDNA and not actual cDNA. In addition, Melloni teaches random priming and labeling of the resulting fragments, but has no suggestion of fragmenting the products of the random priming step. In short, Melloni provides no teaching or suggestion of fragmentation of cDNA. Therefore, the Office Action has failed to establish a *prima*

facie case of obviousness and the rejection of independent claims 1 and dependent claims 2-4, 6, and 10-29.

Claim 5 is rejected under 35 U.S.C. §103(a) over Lockhart in view of Pharmacia, Melloni, Stahl and further in view of the Gibco BRL Catalog. The Gibco BRL Catalog is cited by the Examiner as teaching the use of terminal transferase for labeling DNA.

Claim 5 is nonobvious for at least the same reasons as stated above for claim 1 from which claim 5 depends.

CONCLUSION

In view of the foregoing, this application should be in condition for allowance. A notice to this effect is respectfully requested.

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Respectfully submitted,

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